

Ship 10/07/1

# Work Order ID 48624

Friday, June 26, 2009 9:16:30 AM



Page 1

Item ID: D3923-1

Accept



Setup Start



Revision ID: A-PRELIM

Stop



Item Name: ANGLE

Start Date: 7/15/2009 Start Qty: 20.00



Cust Item ID:

Required Date: 8/3/2009 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

100

0.00



Waterjet

0.00

FLOW CNC Waterjet

Memo

1-Cut as per Dwg  
Dwg Rev: Prelim  
Prog Rev: Prelim

2-Deburr if necessary

⇒ ml 09.07.08 (20)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

⇒ ml 09.07.08 (20)

6061 .063 B# 110551

ml 09.07.08

PRELIMINARY ISSUE

**Work Order ID 48624**

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Item ID: D3923-1

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Revision ID: PRELIM

Item Name: ANGLE

Setup Start

Stop

Start Date: 7/15/2009 Start Qty: 20.00

Required Date: 8/3/2009 Req'd Qty: 20.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

ENGINEERING  
APPROVAL

20

0

200708

130

QC8- Inspect parts - second check

0.00



Brake NC

Memo

0.00

Brake NC

1- Bend as per Dwg

20

0

SB 08/07/08

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

ENGINEERING  
APPROVAL

20

0

200708

parts sh

PTC

08/09/08

**Work Order ID 48624**

Friday, June 26, 2009 9:16:30 AM

Page 3

Item ID: D3923-1

Accept

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Item Name: ANGLE

Start Date: 7/15/2009 Start Qty: 20.00

Required Date: 8/3/2009 Req'd Qty: 20.00

Cust Item ID:

Customer:



Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150  Packaging Packaging	Identify as per dwg & Stock Location: <b>199C</b>  Memo	0.00  0.00				9/7/10		<b>200</b>	<b>SP</b>
160  QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							

09/10/14 **MF**RELEASE  
POSITIVE RETURN  
09/08/28  
MF  
09/10/14 W 9.07.15MF  
09-09-10

# Picklist Print

Friday, June 26, 2009 9:16:30 AM

Page 1

Work Order ID: 48624



Parent Item: D3923-1RevPRELIM



Parent Item Name: ANGLE



Start Date: 7/15/2009

Required Date: 8/3/2009

Comments: Rev:A new issue

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M6061T6S.063  6061-T6 .063 Sheet		Purchased			No		sf	0.0000	1.7474 	110551	ml 09 07 07	

Date: Wednesday, 17/06/2009 10:28:46 AM  
 User: Melanie Fauteux

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : ANGLE  
 Job Number : 48624  
 Estimate Number : 14021  
 P.O. Number :  
 This Issue : 17/06/2009 S.O. No. :  
 Prsht Rev. : NC  
 First Issue : / / Type : SMALL /MED FAB  
 Previous Run :  
 Written By :  
 Checked & Approved By : MF 09-06-17  
 Comment : Est Rev:A 09-06-09 new issue EC verified by:DD

Part Number : D39231  
 Drawing Number : D3923 REV A  
 Project Number : N/A  
 Drawing Revision : A  
 Material :  
 Due Date : 24/06/2009 Qty: 20 Um: Each

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 ✓ M6061T6S063 6061-T6 .063 Sheet



Comment: Qty.: 0.0872 sf(s)/Unit Total : 1.7430 sf(s)

6061-T6 .063 Sheet

Batch: 110551

ml 09-07-07

2.0 ✓ WATER JET FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per Dwg

Dwg Rev: \_\_\_\_\_

Prog Rev: \_\_\_\_\_

2-Debur if necessary

3.0 ✓ QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 ✓ QC8 SECOND CHECK



Comment: SECOND CHECK

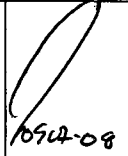

5.0 ✓ BRAKE NC NC BRAKE



Comment: NC BRAKE

1- Bend as per Dwg

814

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
050708 <del>12/10</del>	140 in	Parts <del>now</del> should be Alodine & powder coated as per drawing. Not this time for testing only. See attached e-mail. Add to work anyway for the next time. Perm. Change				 050708	 050708

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 17/06/2009 10:28:46 AM  
User: Melanie Fauteux

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ANGLE

Job Number: 48624

Part Number: D39231

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

✓ QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0

✓

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify as per dwg and Stock

Location: \_\_\_\_\_

8.0

✓

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





**L Lacelle**

**From:** Harvey Siemens [hsiemens@dartaero.com]  
**Sent:** July 8, 2009 12:16 PM  
**To:** 'L Lacelle'  
**Subject:** RE: map box

Linda

Since this one part is going to be used for testing it doesn't need paint or powder coat or even alodine. Just the part assembled will be fine.

David should have the corrected DXFs now for the hole glitch.

Thanks for getting it out fast

Regards,

*Harvey Siemens*

Mechanical Designer  
DART Aerospace Ltd.

P: 403-717-0328

F: 403-717-1288

E: [hsiemens@dartaero.com](mailto:hsiemens@dartaero.com)

W: [www.dartaero.com](http://www.dartaero.com)

M: 1060 McTavish Road NE, Calgary, Alberta, T2E 5G9

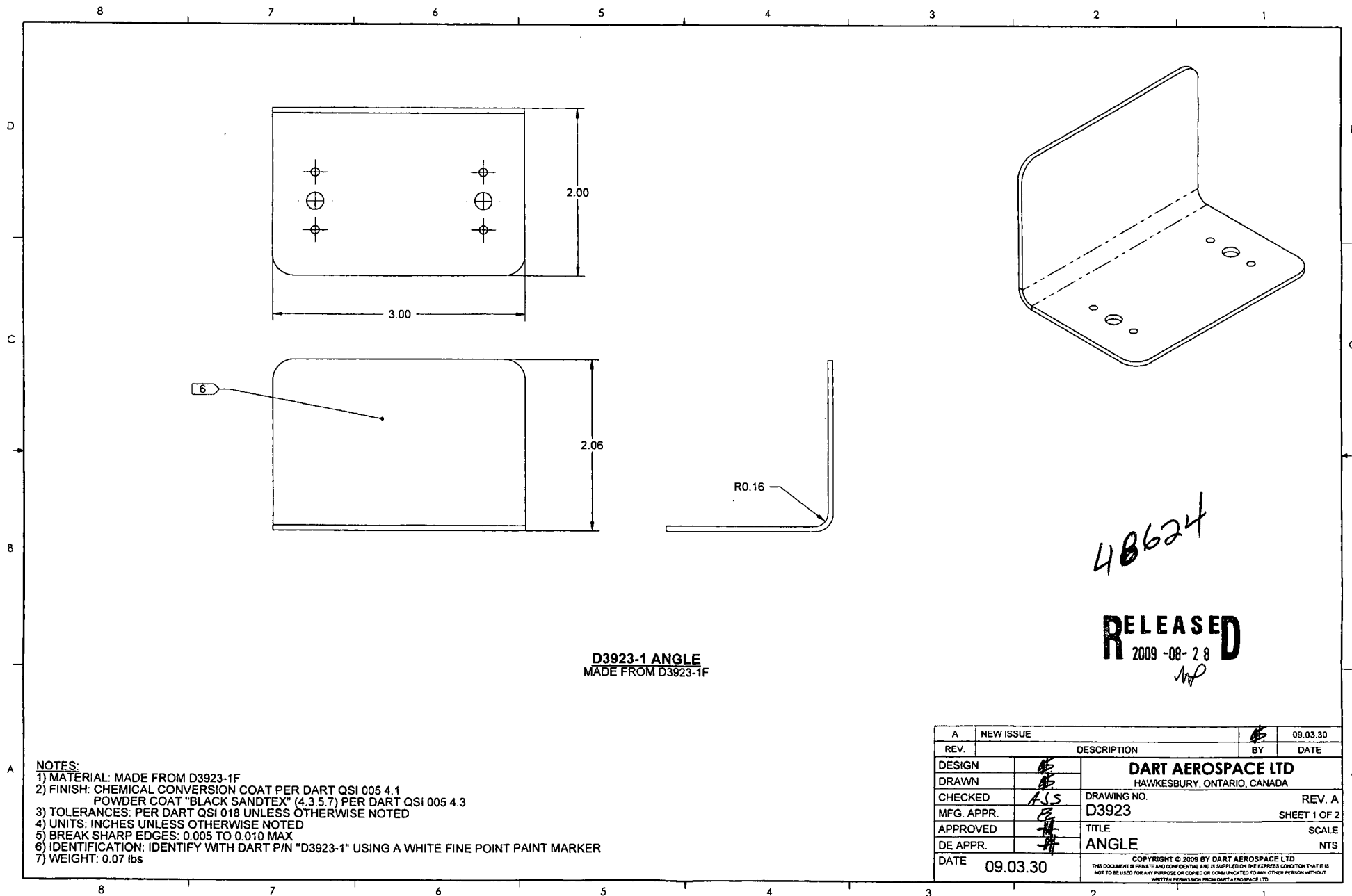
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**From:** L Lacelle [mailto:[llacelle@dartaero.com](mailto:llacelle@dartaero.com)]  
**Sent:** Wednesday, July 08, 2009 9:29 AM  
**To:** 'Harvey Siemens'  
**Cc:** 'David Duval'; 'Sian Willems'  
**Subject:** map box

There is a problem with the holes, David is working on it, we will only TRY to ship out by Friday, depending on when this gets fixed.

Thank You,  
Linda Lacelle  
Production Manager  
Dart Aerospace Ltd

7/08/09



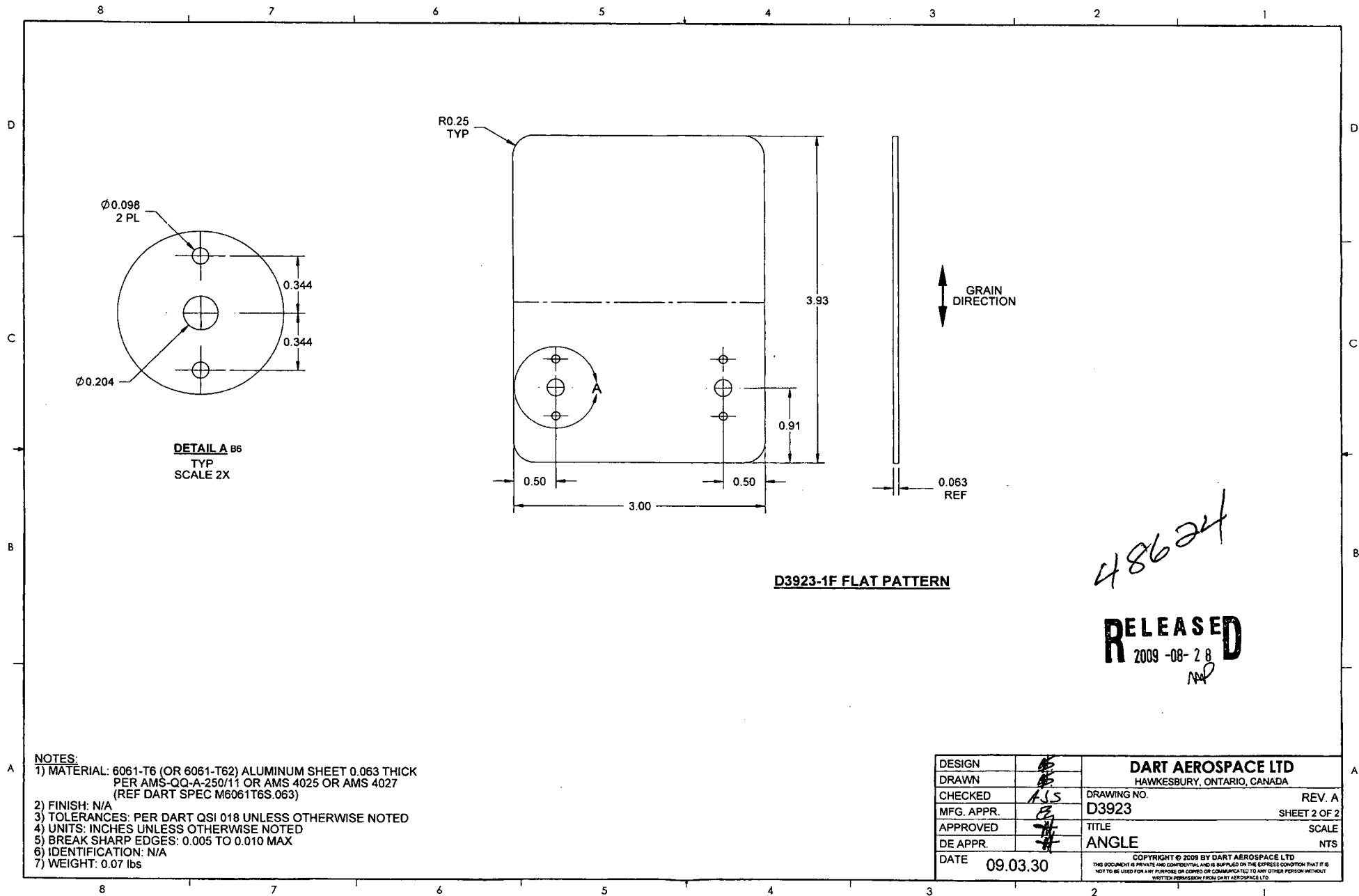
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

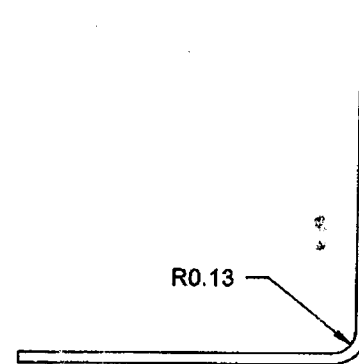
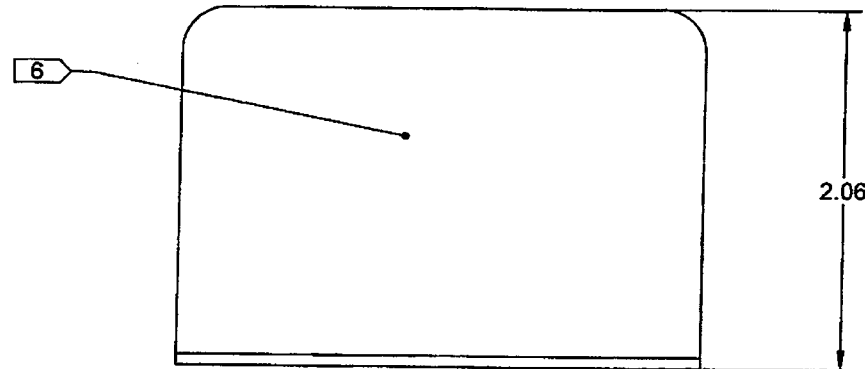
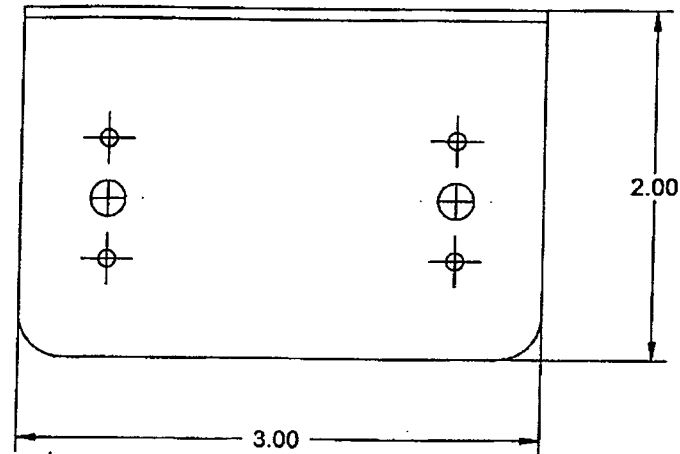
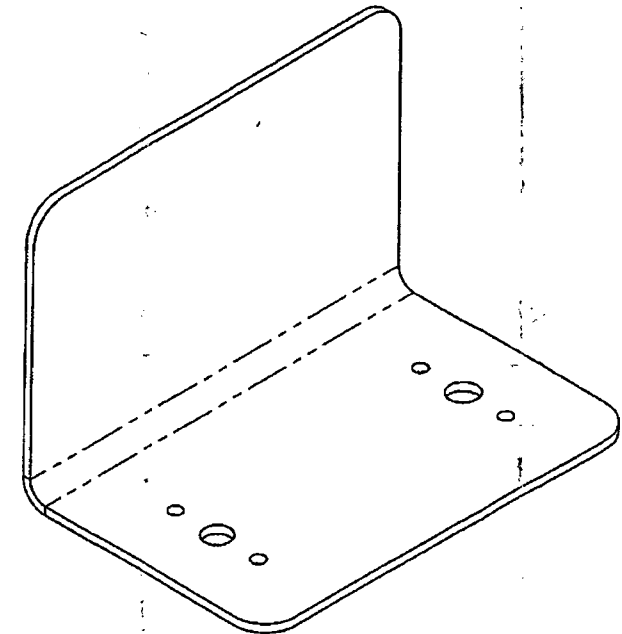
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

PRELIMINARY ISSUE

MP 09/08/08



D3923-1 ANGLE  
MADE FROM D3923-1F

Done E

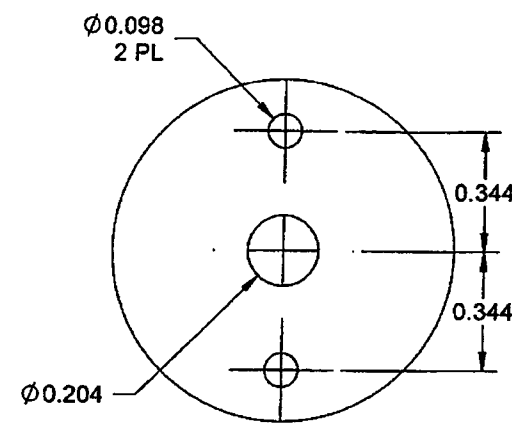
NOTES:

- 1) MATERIAL: MADE FROM D3923-1F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT "BLACK" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3923-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.07 lbs

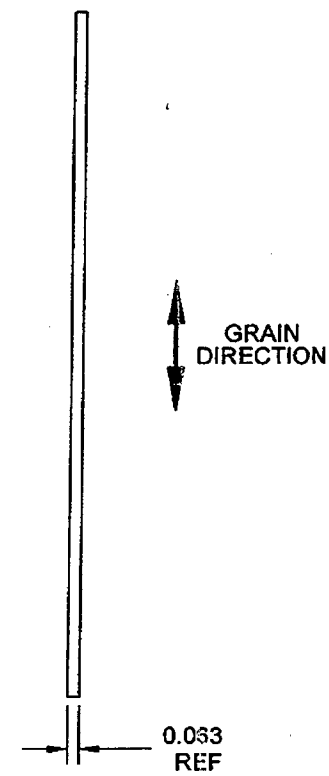
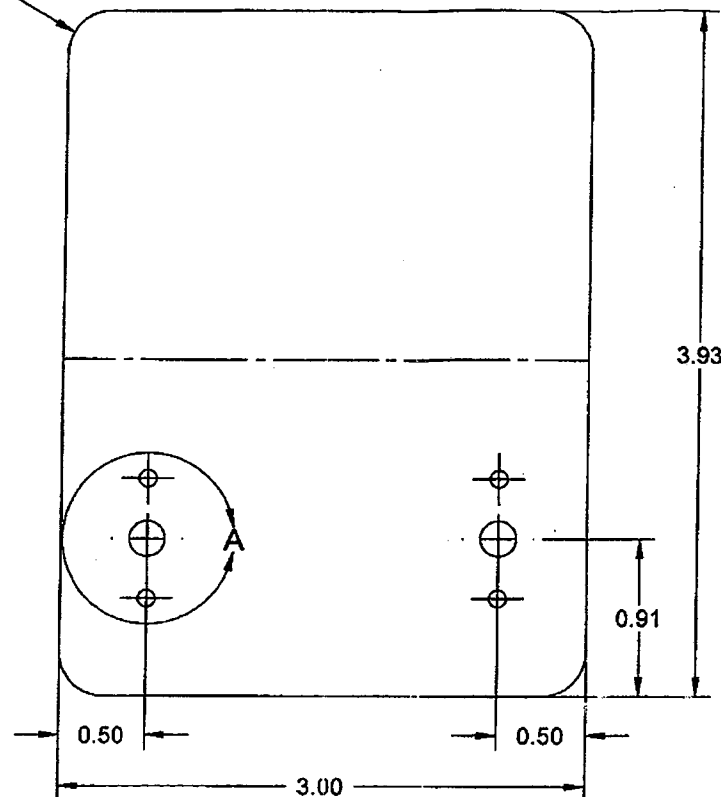
A	NEW ISSUE	BY	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	AS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AS		
CHECKED	AS	DRAWING NO.	REV. A
MFG. APPR.	E	D3923	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		ANGLE	NTS
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PRELIMINARY ISSUE

MD 09/08/08



R0.25  
TYP



D3923-1F FLAT PATTERN

**NOTES:**

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.063 THICK PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027  
REF DART SPEC M6061T6S.063
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.07 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ALS	DRAWING NO.	REV. A
MFG. APPR.	CE	D3923	SHEET 2 OF 2
APPROVED		TITLE	SCALE
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